



OIPE

ENTERED

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/081,119

DATE: 03/08/2002

TIME: 15:11:03

Input Set : D:\Seqlist.txt

```
4 <110> APPLICANT: Reinhard, Christoph
              Jefferson, Anne B.
              Chan, Vivien W.
      8 <120> TITLE OF INVENTION: TTK in Diagnosis and as a Therapeutic
              Target in Cancer
     11 <130> FILE REFERENCE: 16932.002
C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/081,119
     14 <141> CURRENT FILING DATE: 2002-02-21
     16 <150> PRIOR APPLICATION NUMBER: 60/289,813
     17 <151> PRIOR FILING DATE: 2001-02-21
     19 <160> NUMBER OF SEQ ID NOS: 38
     21 <170> SOFTWARE: FastSEQ for Windows Version 4.0
     23 <210> SEQ ID NO: 1
     24 <211> LENGTH: 20
     25 <212> TYPE: DNA
     26 <213> ORGANISM: Artificial Sequence
     28 <220> FEATURE:
     29 <223> OTHER INFORMATION: synthesized oligonucleotide
     31 <400> SEQUENCE: 1
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     34 <210> SEQ ID NO: 2
     35 <211> LENGTH: 21
     36 <212> TYPE: DNA
     37 <213> ORGANISM: Artificial Sequence
     39 <220> FEATURE:
     40 <223> OTHER INFORMATION: synthesized oligonucleotide
     42 <400> SEQUENCE: 2
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     43 ggttgctcaa aagttggtat g
     45 <210> SEQ ID NO: 3
     46 <211> LENGTH: 24
     47 <212> TYPE: DNA
     48 <213> ORGANISM: Artificial Sequence
     50 <220> FEATURE:
     51 <223> OTHER INFORMATION: synthesized oligonucleotide
     53 <400> SEQUENCE: 3
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     54 cgggaaatcg tgcgtgacat taag
     56 <210> SEQ ID NO: 4
     57 <211> LENGTH: 24
     58 <212> TYPE: DNA
     59 <213> ORGANISM: Artificial Sequence
     61 <220> FEATURE:
     62 <223> OTHER INFORMATION: synthesized oligonucleotide
     64 <400> SEQUENCE: 4
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Input Set : D:\Seqlist.txt

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|--|------------|
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| 68 <211> LENGTH: 25 | |
| 69 <212> TYPE: DNA | |
| 70 <213> ORGANISM: Artificial Sequence | |
| 72 <220> FEATURE: | |
| 73 <223> OTHER INFORMATION: synthesized oligonucleotide 75 <400> SEQUENCE: 5 | |
| 76 gggactette caaatgggea tgaet | 25 |
| 78 <210> SEQ ID NO: 6 | 23 |
| 79 <211> LENGTH: 25 | |
| 80 <212> TYPE: DNA | |
| 81 <213> ORGANISM: Artificial Sequence | |
| 83 <220> FEATURE: | |
| 84 <223> OTHER INFORMATION: synthesized oligonucleotide | |
| 86 <400> SEQUENCE: 6 | |
| 87 tocagtaact cttgcgttcc catgg | 25 |
| 89 <210> SEQ ID NO: 7 | |
| 90 <211> LENGTH: 25 | |
| 91 <212> TYPE: DNA | |
| 92 <213> ORGANISM: Artificial Sequence | |
| 94 <220> FEATURE: | |
| 95 <223> OTHER INFORMATION: synthesized oligonucleotide | |
| 97 <400> SEQUENCE: 7 | 0.5 |
| 98 tcagtacggg taaaccttct caggg | 25 |
| 100 <210> SEQ ID NO: 8 | |
| 101 <211> LENGTH: 25 | |
| 102 <212> TYPE: DNA | |
| 103 <213> ORGANISM: Artificial Sequence | |
| 105 <220> FEATURE: 106 <223> OTHER INFORMATION: synthesized oligonucleotide | |
| 108 <400> SEQUENCE: 8 | |
| 100 qgtaccettg egtteteaat gacet | 25 |
| 111 <210> SEQ ID NO: 9 | |
| 112 <211> LENGTH: 25 | |
| 113 <212> TYPE: DNA | |
| 114 <213> ORGANISM: Artificial Sequence | |
| 116 <220> FEATURE: | |
| 117 <223> OTHER INFORMATION: synthesized oligonucleotide | |
| 119 <400> SEQUENCE: 9 | |
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| 122 <210> SEQ ID NO: 10 | |
| 123 <211> LENGTH: 25 | |
| 124 <212> TYPE: DNA | |
| 125 <213> ORGANISM: Artificial Sequence | |
| 127 <220> FEATURE: | |
| 128 <223> OTHER INFORMATION: synthesized oligonucleotide | |
| 130 <400> SEQUENCE: 10 | 25 |
| 131 gctgggtagt ggccggtttc tggat | <i>L J</i> |
| | |

Input Set : D:\Seqlist.txt

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133 <210> SEQ ID NO: 11
134 <211> LENGTH: 25
135 <212> TYPE: DNA
136 <213> ORGANISM: Artificial Sequence
138 <220> FEATURE:
139 <223> OTHER INFORMATION: synthesized oligonucleotide
141 <400> SEQUENCE: 11
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144 <210> SEQ ID NO: 12
145 <211> LENGTH: 25
146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: synthesized oligonucleotide
152 <400> SEQUENCE: 12
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155 <210> SEQ ID NO: 13
156 <211> LENGTH: 3866
157 <212> TYPE: DNA
158 <213> ORGANISM: Homo sapien
160 <220> FEATURE:
161 <221> NAME/KEY: CDS
162 <222> LOCATION: (1026)...(3551)
164 <221> NAME/KEY: misc_feature
165 <222> LOCATION: (0)...(0)
166 <223> OTHER INFORMATION: TTK
168 <400> SEQUENCE: 13
169 ggaattcctt ttttttttt tttgagatgg agtttcactc ttgttggcca ggctggagtg 60
170 caatggcaca atctcagctt actgcaacct ccgcctcccg ggttcaagcg attctcctgc 120
171 ctcagcctct caagtagctg ggattacagg catgtgccac cacccctggc taactaattt 180
172 cttttctatt tagtagagat ggggtttcac catgttggtc aggctggtct tgaactcctg 240
173 acctcaggtg atccacttgc cttggcctcc caaagtgcta ggattacagc cgtgaaactg 300
174 tgcctggctg attcttttt tgttgttgga tttttgaaac agggtctccc ttggtcgccc 360
175 aggctggagt gcagtggtgc gatcttggct cactataacc tccacctcct ggtttcaagt 420
176 gatectecca etttageete etgagtaget gtgattacag gegtgeacca ceacaceegg 480
177 ctaatttttg tatttttatt agagacaggg tttcaccatg ttggccaggc tgttctcaaa 540
178 ctcctggact caagggatcc gcctgcctcc acttcccaaa gtcccgagat tacaggtgtg 600
179 agtcaccatg cctgacctta taattcttaa gtcatttttt ctggtccatt tcttccttag 660
180 ggtcctcaca acaaatctgc attaggcggt acaataatcc ttaacttcat gattcacaaa 720
181 aggaagatga agtgattcat gatttagaaa ggggaagtag taagcccact gcacactcct 780
182 ggatgatgat cctaaatcca gatacagtaa aaatggggta tgggaaggta gaatacaaaa 840
183 tttggtttaa attaattatc taaatatcta aaaacatttt tggatacatt gttgatgtga 900
184 atgtaagact gtacagactt cctagaaaac agtttgggtt ccatcttttc atttccccag 960
185 tgcagttttc tgtagaaatg gaatccgagg atttaagtgg cagagaattg acaattgatt 1020
186 ccata atg aac aaa gtg aga gac att aaa aat aag ttt aaa aat gaa gac 1070
187
          Met Asn Lys Val Arg Asp Ile Lys Asn Lys Phe Lys Asn Glu Asp
188
          1
                                               10
190 ctt act gat gaa cta agc ttg aat aaa att tct gct gat act aca gat
                                                                      1118
191 Leu Thr Asp Glu Leu Ser Leu Asn Lys Ile Ser Ala Asp Thr Thr Asp
```

Input Set : D:\Seqlist.txt

| 192 | | | | | 20 | | | | | 25 | | | | | 30 | | |
|-----|-----|--------|-----|---------|-----|------|------------|-----|-----|-----|-----|-----|-----|----------|-----|-------|------|
| | 224 | +04 | | 2.at | | 220 | C23 | 2++ | a+~ | | ata | aa. | 220 | 3 a C | cca | a a a | 1166 |
| | | | | | | | | | | | | | | | Pro | | 1100 |
| 196 | nsu | 361 | GLY | 35 | Val | HOII | GIII | 110 | 40 | Mec | Hec | ALG | Aon | 45 | 110 | GIU | |
| 198 | gac | tgg | ttg | agt | ttg | ttg | ctc | aaa | cta | gag | aaa | aac | agt | gtt | ccg | cta | 1214 |
| 199 | Asp | Trp | Leu | Ser | Leu | Leu | Leu | Lys | Leu | Glu | Lys | Asn | Ser | Val | Pro | Leu | |
| 200 | | | 50 | | | | | 55 | | | | | 60 | | | | |
| 202 | agt | gat | gct | ctt | tta | aat | aaa | ttg | att | ggt | cgt | tac | agt | caa | gca | att | 1262 |
| 203 | Ser | Asp | Ala | Leu | Leu | Asn | Lys | Leu | Ile | Gly | Arg | Tyr | Ser | Gln | Ala | Ile | |
| 204 | | 65 | | | | | 70 | | | | | 75 | | | | | |
| 206 | gaa | gcg | ctt | ccc | cca | gat | aaa | tat | ggc | caa | aat | gag | agt | ttt | gct | aga | 1310 |
| 207 | Glu | Ala | Leu | Pro | Pro | Asp | Lys | Tyr | Gly | Gln | Asn | Glu | Ser | Phe | Ala | Arg | |
| 208 | 80 | | | | | 85 | | | | | 90 | | | | | 95 | |
| 210 | att | caa | gtg | aga | ttt | gct | gaa | tta | aaa | gct | att | caa | gag | cca | gat | gat | 1358 |
| 211 | Ile | Gln | Val | Arg | Phe | Ala | Glu | Leu | Lys | Ala | Ile | Gln | Glu | Pro | Asp | Asp | |
| 212 | | | | | 100 | | | | | 105 | | | | | 110 | | |
| 214 | gca | cgt | gac | tac | ttt | caa | atg | gcc | aga | gca | aac | tgc | aag | aaa | ttt | gct | 1406 |
| 215 | Ala | Arg | Asp | Tyr | Phe | Gln | Met | Ala | Arg | Ala | Asn | Сув | Lys | Lys | Phe | Ala | |
| 216 | | | | 115 | | | | | 120 | | | | | 125 | | | |
| 218 | ttt | gtt | cat | ata | tct | ttt | gca | caa | ttt | gaa | ctg | tca | caa | ggt | aat | gtc | 1454 |
| 219 | Phe | Val | His | Ile | Ser | Phe | Ala | Gln | Phe | Glu | Leu | Ser | Gln | Gly | Asn | Val | |
| 220 | | | 130 | | | | | 135 | | | | | 140 | | | | |
| | | | | | | | | | | | | | | | gca | | 1502 |
| 223 | Lys | Lys | Ser | Lys | Gln | Leu | Leu | Gln | Lys | Ala | Val | Glu | Arg | Gly | Ala | Val | |
| 224 | | 145 | | | | | 150 | | | | | 155 | | | | | |
| | | | | | | | | | | | | | | | caa | | 1550 |
| 227 | Pro | Leu | Glu | Met | Leu | Glu | Ile | Ala | Leu | Arg | | Leu | Asn | Leu | Gln | | |
| | 160 | | | | | 165 | | | | | 170 | | | | | 175 | |
| | | | | | | | | | | | | | | | tct | | 1598 |
| | Lys | Gln | Leu | Leu | Ser | Glu | Glu | Glu | Lys | Lys | Asn | Leu | Ser | Ala | Ser | Thr | |
| 232 | | | | | 180 | | | | | 185 | | | | | 190 | | |
| | - | | | | | | | | | | | | | | tta | | 1646 |
| | Val | Leu | Thr | | Gln | Glu | Ser | Phe | | Gly | Ser | Leu | GIĀ | | Leu | GIn | |
| 236 | | | | 195 | | | | | 200 | | | | | 205 | | | 2004 |
| | | | | | | | | | | | | | | | gcc | | 1694 |
| | Asn | Arg | | Asn | ser | Cys | Asp | | Arg | GTĀ | GIN | Thr | | ьys | Ala | Arg | |
| 240 | | | 210 | | | | | 215 | | | | | 220 | | | | 1740 |
| | | | | | | | | | | | | | | | ggt | | 1742 |
| | Pne | | туг | GIĀ | GLU | Asn | | Pro | Pro | GIN | Asp | | GIU | 116 | Gly | TÄL | |
| 244 | | 225 | | 4.4. | | | 230 | | | | | 235 | 4 | 4 | | | 1700 |
| | | | | | | | | | | | | | | | cca | | 1790 |
| | | Asn | ser | Leu | Arg | | Thr | Asn | гаг | Thr | | GIN | Ser | Cys | Pro | | |
| | 240 | | | | | 245 | | | | | 250 | | | | | 255 | 1020 |
| | | | | | | | | | | | | | | | gtg | | 1838 |
| | GTĀ | Arg | νа⊥ | Pro | | Asn | ьeu | ьeu | Asn | | Pro | Asp | Cys | Asp | Val | ьys | |
| 252 | | سلميسم | | | 260 | | | | | 265 | | | | 200 | 270 | 242 | 1000 |
| | | - | - | | _ | - | | _ | | - | | _ | | | tct | - | 1886 |
| | rnr | Asp | Asp | | val | vaı | PTO | Cys | | met | гйг | arg | GIN | | Ser | Arg | |
| 256 | | | | 275 | | | | | 280 | | | | | 285 | | | |

Input Set : D:\Seqlist.txt

| 258 | tca | gaa | tgc | cga | gat | ttg | gtt | gtg | cct | gga | tct | aaa | cca | agt | gga | aat | 1934 |
|-----|------|------|--------|------|------|------|------|------------|-----|------|------|------|----------|------|-------|------|------|
| 259 | Ser | Glu | Cys | Arg | Asp | Leu | Val | Val | Pro | Gly | Ser | Lys | Pro | Ser | Gly | Asn | |
| 260 | | | 290 | | | | | 295 | | | | | 300 | | | | |
| 262 | gat | tcc | tgt | gaa | tta | aga | aat | tta | aag | tct | gtt | caa | aat | agt | cat | ttc | 1982 |
| | Asp | | - | - | | - | | | - | | - | | | | | | |
| 264 | • | 305 | • | | | - | 310 | | • | | | 315 | | | | | |
| | aaq | | cct | cta | ata | t.ca | | σaa | ааσ | agt | tct | αaa | ctt | att | att | act. | 2030 |
| | Lys | - | | - | | | - | - | - | - | | - | | | | | |
| | 320 | | | | | 325 | | | -1- | | 330 | | | | | 335 | |
| | gat | tca | ata | acc | cta | | aat | 222 | аса | паа | | agt | ctt | cta | act | | 2078 |
| | Asp | | | | - | _ | | | - | - | | • | | | - | | 20.0 |
| 272 | пор | 001 | 110 | 1114 | 340 | -10 | | - 1 | | 345 | 001 | 001 | 200 | 200 | 350 | 770 | |
| | tta | ma a | maa | act | | aaa | tat | caa | maa | | αασ | att | cca | σаσ | | aac | 2126 |
| | Leu | - | _ | | | | | | | | | _ | | | | | 2220 |
| 276 | пеа | Gra | GLa | 355 | шуз | Gra | 111 | GIII | 360 | 110 | GIU | Val | 110 | 365 | JUL | H311 | |
| | cag | 222 | a a a | | ~~~ | aat | 220 | 2012 | | taa | asa. | +~+ | a++ | | a a a | 22t | 2174 |
| | Gln | | | | | | | | | | | | | | | | 21/4 |
| | GIII | гуу | 370 | пр | GTII | міа | пуз | 375 | цуѕ | 261 | GIU | Cys | 380 | HOII | GIII | Mell | |
| 280 | | | | +~+ | + | + | | | | -++ | ~~~ | ~~~ | | ~~~ | | | 2222 |
| | cct | | | | | | | | | | | | | | | | 2222 |
| | Pro | | Ala | ser | Ser | ASII | | тър | GID | 116 | Pro | | ьец | Ald | AIG | TAR | |
| 284 | | 385 | | ~~~ | | | 390 | ~~~ | | +++ | ~~~ | 395 | | ~+~ | +++ | +~~ | 2270 |
| | gtt | | | | _ | | | | | | | | | | | | 2270 |
| | Val | ASII | THE | GIU | GIII | - | HIS | THI | THE | Pne | | GTII | PIO | Agr | Pne | | |
| 288 | | | | | | 405 | | | | | 410 | | . | | | 415 | 2210 |
| | gtt | | | - | | | | | | | | | | | _ | | 2318 |
| | Val | ser | гÀг | GII | | PIO | Pro | TTE | ser | | ser | гуя | ттр | rne | | PIO | |
| 292 | | | - 4-4- | | 420 | | | | | 425 | | | ~-+ | | 430 | -+- | 2266 |
| | aaa | | | _ | _ | | | - | | | | _ | | | | | 2366 |
| | Lys | ser | He | - | гĀг | Thr | PLO | ser | | ASI | TUL | ьeu | ASP | _ | TAL | Met | |
| 296 | | | | 435 | | | _4.4 | | 440 | | | | | 445 | | ++ | 2414 |
| | agc | - | | - | | | - | _ | - | | - | | | | _ | | 2414 |
| | Ser | Cys | | Arg | Thr | PIO | val | | ьys | ASII | Asp | PHE | | Pro | Ald | Cys | |
| 300 | | | 450 | | | | | 455 | | | | | 460 | | | | 2462 |
| | cag | | | | | | | | | | | | | | | | 2462 |
| | Gln | | ser | Thr | PIO | TAL | _ | GIN | PIO | Ala | Cys | | GIN | GIII | GIN | GIN | |
| 304 | | 465 | _ 4 | | | | 470 | | | | | 475 | | | | | 2510 |
| _ | cat | _ | | | - | | | | _ | | | | _ | | | | 2510 |
| | His | GIN | TTE | теп | Ala | | Pro | ren | GIN | Asn | | GIN | vaı | Leu | Ата | | |
| 308 | | | | | | 485 | | | | | 490 | | | | | 495 | |
| | tct | | - | | - | _ | | _ | - | | | - | | | | | 2558 |
| | Ser | Ser | Ala | Asn | | Cys | He | Ser | Vai | - | GIY | Arg | He | Tyr | | He | |
| 312 | | | | | 500 | | | | | 505 | | | | | 510 | | |
| | tta | | | | | | | | | | | | | | | | 2606 |
| | Leu | Lys | Gin | | GTĀ | Ser | GTA | GLA | | Ser | Lys | Val | Phe | | Val | Leu | |
| 316 | | | | 515 | | | | | 520 | | | | | 525 | | | |
| | aat | | | | | | | | | | | | | | | | 2654 |
| | Asn | Glu | - | Lys | Gln | Ile | Tyr | | Ile | Lys | Tyr | Val | | Leu | Glu | Glu | |
| 320 | | | 530 | | | | | 535 | | | | | 540 | | | | |
| 322 | gca | gat | aac | caa | act | ctt | gat | agt | tac | cgg | aac | gaa | ata | gct | tat | ttg | 2702 |
| | | | | | | | | | | | | | | | | | |

VERIFICATION SUMMARYDATE: 03/08/2002PATENT APPLICATION: US/10/081,119TIME: 15:11:04

Input Set : D:\Seqlist.txt

Output Set: N:\CRF3\03082002\J081119.raw

L:13 M:270 C: Current Application Number differs, Replaced Current Application Number